

REMARKS

This Amendment responds to the Office Action dated August 23, 2006 in which the Examiner rejected claims 1-8 and 10-17 under 35 U.S.C. §103 and objected to claim 9 as being dependent upon rejected base claim but would be allowable if rewritten in independent form.

Claims 1-3, 7-8, 10, 12-14 and 16-17 were rejected under 35 U.S.C. §103 as being unpatentable over *Ikeshoji et al.* (U.S. Patent No. 6,088,479) in view of *Abe et al.* (U.S. Patent No. 5,086,434) and *Ohta* (U.S. Patent 6,163,623).

Ikeshoji et al. appears to disclose in Figure 1 first extracting a background image using a maximum filter 100 and a noise removal filter 110. (Column 2, line 49 through column 3, line 16). Subsequently, the background image obtained using the maximum filter and noise removal filter is then subtracted from the original image data to obtain a character and figure image 30D which is subsequently stored. (Column 3, lines 17-23).

Thus, *Ikeshoji et al.* merely discloses obtaining a background image and subsequently subtracting the background image from the image data to obtain a character and figure image data. Nothing in *Ikeshoji et al.* shows, teaches or suggests first conducting character recognition on the image data and thereafter replacing the character images with the background image as claimed in claims 1-3, 7 and 17. Rather, *Ikeshoji et al.* merely discloses extracting a background image which is then subtracted from the image data to obtain a character and figure image data (foreground image).

Applicant respectfully submits that in the claimed invention, an area of a character image is replaced with a background color, and this process is performed

after the position of the character image is detected. In other words, the replacement of the character image is started after the character image data is found by character recognition. *Ikeshoji et al.* merely discloses extracting a background image prior to extracting the foreground image (character and figure image). Thus, nothing in *Ikeshoji et al.* shows, teaches or suggests the features as claimed in claims 1-3, 7 and 17.

Abe et al. appears to disclose a process and apparatus for transmitting mixed data (column 1, line 11). Data of an original text is subjected to character recognition and the recognized characters are transmitted as code blocks, while unrecognized characters are transmitted as bit image blocks (column 7, lines 46-61).

Thus, *Abe et al.* merely discloses character recognition. Nothing in *Abe et al.* shows, teaches or suggests after conducting character recognition, replacing the character images with the background image as claimed in claims 1-3, 7 and 17. Rather, *Abe et al.* only discloses character recognition.

Ohta appears to disclose optical character recognition (OCR) systems. (Column 1, lines 10-11). An outline of a copying process is explained referring to the flowchart illustrated in FIG. 3. When a character recognition mode is selected via the user interface 310, the image scanner 100 reads in step S1 such a document as illustrated in FIG. 7 and the image data from the document is stored in the input memory of the memory unit 330. Then in step S2, the recognition pre-processor 340 in the image processor 370 eliminates small black pixels caused by dust or dirt on the contact glass. More particularly, only the areas containing characters and figures images are extracted, eliminating noise and screen image areas. Also, the kind of image data contained in each areas extracted are determined and such areas are

rearranged in groups for recognition processing as described later. The image processing unit 370 including the recognition pre-processor 340, recognition unit 350, and drawing processor 360 are implemented using one or more programmed microprocessors. (Column 5, lines 15-31).

Thus, *Ohta* merely discloses a pre-processor 370 which eliminates small black pixels caused by dust or dirt on a contact glass. Nothing in *Ohta* shows, teaches or suggests detecting character recognition and subsequently replacing the character image with a background image as claimed in claims 1-3, 7 and 17. Rather, *Ohta* only discloses eliminating small black pixels caused by dust or dirt.

A combination of *Ikeshoji et al.*, *Abe et al.* and *Ohta* would merely suggest first obtaining the background image and then subtracting the background image from the image data to obtain a character and figure image data as taught by *Ikeshoji et al.*, subsequently performing character recognition on the character and figure image data as taught by *Abe et al.*, and eliminating small black pixels caused by dust or dirt on a contact glass as taught by *Ohta*. Thus, nothing in the combination of the references shows, teaches or suggests detecting character image data by character recognition and subsequently replacing the area of the character image with a background color as claimed in claims 1-3, 7 and 17.

Since nothing in *Ikeshoji et al.*, *Abe et al.*, or *Ohta* show, teach or suggest the primary features as claimed in claims 1-3, 7 and 17, Applicant respectfully requests the Examiner withdraws the rejection to claims 1-3, 7 and 17 under 35 U.S.C. §103.

Claims 8, 10, 12-14 and 16 recite additional features. Applicant respectfully submits that claims 8, 10, 12-14 and 16 would not have been obvious within the meaning of 35 U.S.C. §103 over *Ikeshoji et al.*, *Abe et al.* and *Ohta* at least for the

reasons as set forth above. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 8, 10, 12-14 and 16 under 35 U.S.C. §103.

Claims 4 and 15 were rejected under 35 U.S.C. §103 as being unpatentable over *Ikeshoji et al.* in view of *Abe et al.*, *Ohta* and further in view of *Melen* (U.S. Patent No. 6,151,423).

As discussed above, nothing in *Ikeshoji et al.*, *Abe et al.* or *Ohta* show, teach or suggest conducting character recognition of image data prior to generating a changed image without the character image as claimed in claim 4.

Melen appears to disclose optical character recognition and more particularly determining an orientation of a scanned page (column 1, lines 7-9).

Thus, *Melen* merely discloses determining the orientation of a scanned page. Nothing in *Melen* shows, teaches or suggests conducting character recognition of image data prior to generating a changed image without the character image as claimed in claim 4.

Since nothing in *Ikeshoji et al.*, *Abe et al.*, *Ohta* and *Melen* show, teach or suggest the primary features as claimed in claim 4, Applicant respectfully requests the Examiner withdraws the rejection to claim 4 under 35 U.S.C. §103.

Claim 15 recites additional feature. Applicant respectfully submits that claim 15 would not have been obvious within the meaning of 35 U.S.C. §103 over *Ikeshoji et al.*, *Abe et al.*, *Melen* and *Ohta* at least for the reasons as set forth above. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claim 15 under 35 U.S.C. §103.

Claim 5 was rejected under 35 U.S.C. §103 as being unpatentable under *Ikeshoji et al.*, *Abe et al.*, *Melen* and *Ohta* and further in view of *Abe et al.* (U.S.

Patent No. 6,289,121). Claim 6 was rejected under 35 U.S.C. §103 as being unpatentable over *Ikeshoji et al.*, *Abe et al.*, *Melen* and *Ohta* and further in view of *Koakutsu et al.* (U.S. Patent No. 6,285,459). Claim 11 was rejected under 35 U.S.C. §103 as being unpatentable over *Ikeshoji et al.*, *Abe et al.* and *Ohta* and further in view of *Johnson* (U.S. Patent No. 5,212,739).

Applicant respectfully traverses the Examiner's rejection of the claims under 35 U.S.C. §103. The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, Applicant respectfully requests the Examiner withdraws the rejection to the claims and allows the claims to issue.

As discussed above, since the combination of the primary references does not show, teach or suggest the primary features as claimed in claims 1-4 and 7, Applicant respectfully submits that the combination of the primary references with the secondary references will not overcome the deficiencies of the primary references. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 5, 6 and 11 under 35 U.S.C. §103.

Since objected to claim 9 depends from allowable claims, Applicant respectfully requests the Examiner withdraws the objection thereto.

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is requested to contact, by telephone, the Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicant respectfully petitions for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

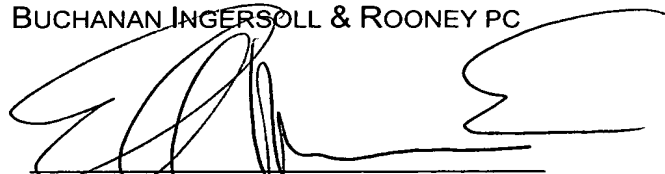
In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: November 22, 2006

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